

ABSTRACT

According to the present invention, there is provided a light scattering type
5 particle detector, using a semiconductor laser as a light source, for detecting particles
contained in sample fluid which defines a flow path, wherein laser light generated from
the semiconductor laser is irradiated to irradiate a region of the flow path with a
concave mirror and thereby a particle detecting region is defined.

According to the present invention, there is also provided a laser oscillator
10 wherein the optical axis of a semiconductor laser for generating pumping laser light has
a predetermined angle with respect to the optical axis of a laser medium for irradiating
laser light by pumping. Using such a laser oscillator, laser light irradiated from the
laser oscillator is condensed to irradiate a region of a flow path defined by sample fluid,
and thereby a particle detecting region is defined. Particles contained in the particle
15 detecting region are detected by receiving scattered light with a light receiving portion.